

**To:** Tapia, Cecilia[Tapia.Cecilia@epa.gov]  
**Cc:** Ferguson, Jaci[Ferguson.Jaci@epa.gov]; Asher, Audrey[Asher.Audrey@epa.gov]; Hammerschmidt, Ron[Hammerschmidt.Ron@epa.gov]  
**From:** Gravatt, Dan  
**Sent:** Mon 9/16/2013 6:19:30 PM  
**Subject:** RE: More Technical Questions re West Lake

Recommend using the following statements:

Landfill fires can start spontaneously and no one can guarantee with 100% certainty that another underground fire or subsurface smoldering event couldn't occur. (Portal Question response)

EPA presently has no data or any other indication that there is a subsurface smoldering event anywhere in Operable Unit 1. (Portal Question response)

Finally, the 2008 OU-1 ROD remedy of capping the waste in place includes measures for "Gas monitoring and control including radon and decomposition gas as necessary." (Page xii of ROD)

Daniel R. Gravatt, PG

US EPA Region 7 SUPR/MOKS

11201 Renner Boulevard, Lenexa, KS 66219

Phone (913)-551-7324

Principles and integrity are expensive, but they are among the very few things worth having.

**From:** Tapia, Cecilia  
**Sent:** Monday, September 16, 2013 9:03 AM  
**To:** Gravatt, Dan  
**Cc:** Ferguson, Jaci; Asher, Audrey; Hammerschmidt, Ron  
**Subject:** FW: More Technical Questions re West Lake

Please work on a response to question 1 noted below



**Cecilia Tapia**  
**Director, Superfund Division**  
**U.S. Environmental Protection Agency - Region 7**  
**11201 Renner Blvd.**  
**Lenexa, KS 66219**

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**From:** Schmidt, Aaron [<mailto:aaron.schmidt@dnr.mo.gov>]  
**Sent:** Monday, September 16, 2013 8:58 AM  
**To:** Hammerschmidt, Ron; Tapia, Cecilia  
**Subject:** FW: More Technical Questions re West Lake

Question 1 below is a question we would look to EPA to answer. We will handle questions 2 and 3.

**From:** Nagel, Chris  
**Sent:** Monday, September 16, 2013 8:32 AM  
**To:** Schmidt, Aaron; Lehman, Larry  
**Subject:** FW: More Technical Questions re West Lake

FYI Will be working up answers later today.

**Chris Nagel**

**Director**

**Solid Waste Management Program**

**Missouri Department of Natural Resources**

**(573) 526-3900**

(573) 526-3902

[chris.nagel@dnr.mo.gov](mailto:chris.nagel@dnr.mo.gov)

**From:** Muenks, Shawn  
**Sent:** Friday, September 13, 2013 4:14 PM  
**To:** Nagel, Chris  
**Cc:** Drake, Tiffany  
**Subject:** FW: More Technical Questions re West Lake

Chris,

Wanted to get this to you before the weekend, but I have some background info on this to share before we send a final response. Questions 2 and 3 pertain to Bridgeton so we will look to you for input on those. Will talk to you on Monday.

Shawn Muenks, P.E.

Missouri Department of Natural Resources

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**From:** Ex. 6 - Personal Privacy  
**Sent:** Friday, September 13, 2013 11:35 AM  
**To:** Muenks, Shawn  
**Subject:** More Technical Questions re West Lake

Mr. Muenks,

Thank you for replying to my previous questions. I'd like to know who in your chain of command you shared my previous emails with, as no one from DNR has ever given me the courtesy of a promised reply.

I have more technical questions for you:

1. If an earthen cap is used with no gas control system, with what scientific certainty and what proven methods guarantee that no SSE's or SSO's will occur? I'd like to know specifically what data has been used.
2. It is my understanding that there is a "hot spot" that was registered in June 750 feet away from the radioactive waste. What scientific certainty and with what data can you guarantee that where the spike occurred will not increase to 170 degrees and be considered an SSE?
3. Knowing that there have been temperature spikes, what public safety contingency plans have MoDNR or Republic put in place to date? I'd like to know when a public safety plan was initiated and it's projected implementation date.

Thank you,

Ex. 6 - Personal Privacy

**From:** "Muenks, Shawn" <[shawn.muenks@dnr.mo.gov](mailto:shawn.muenks@dnr.mo.gov)>  
**To:** "Wendy Lumetta" <[Ex. 6 - Personal Privacy](#)>  
**Cc:** "Drake, Tiffany" <[tiffany.drake@dnr.mo.gov](mailto:tiffany.drake@dnr.mo.gov)>  
**Sent:** Tuesday, September 10, 2013 7:09 AM  
**Subject:** RE: Technical Questions re West Lake

Ex. 6 - Personal Privacy

I am leaving to visit some of my other sites over the next couple days, but I can give some quick responses to your questions.

1. I can not give a guarantee that a SSE will not spontaneously start in Area 1 or Area 2. This possibility is currently under investigation as part of continuing work on the Supplemental Feasibility Study requested by EPA. I can say that the nature of the waste material in Area 1 and Area 2 is much different than that of the Bridgeton Landfill. It is older (placed in the 1950s to 1960s) and there is evidence it did not receive large amounts of municipal waste (household trash) as did the Bridgeton Landfill which makes the possibility of a SSE originating in these areas less likely. But as I stated previously, this is under investigation.

2. Capping landfilled areas is a routine measure to prevent subsurface thermal reactions by preventing infiltration of oxygen. This feature works in conjunction with other gas control systems. So, yes, the EPA proposed cap will prevent the possibility of a future SSE or SSO.

Let me know if you have any other questions.

Shawn Muenks, P.E.

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**From:** Ex. 6 - Personal Privacy

**Sent:** Monday, September 09, 2013 4:49 PM

**To:** Muenks, Shawn

**Subject:** Technical Questions re West Lake

Mr. Muenks,

As I have still not heard from Irene or DNR's HR Department, I await their previously promised reply.

I appreciate the opportunity you have extended to answer my technical questions regarding West Lake. Here are my initial questions:

1. With the known SSE in the South Quarry, and one or more SSO's in the North Quarry, what guarantees can DNR give that an SSE won't spontaneously start in Area 1 or Area 2?

2. If the EPA-proposed cap is put on, will it prevent the possibility of future SSE's or SSO's?

I have many questions and will need time to formulate them. Please get back to me with the answers to these initial questions.

Thank you,

Ex. 6 - Personal Privacy

From: "Muenks, Shawn" <shawn.muenks@dnr.mo.gov>  
To: **Ex. 6 - Personal Privacy**  
Ser  
Subject: RE: Troy LaLond - PS

Ex. 6 - Personal Privacy

It appears you have made the appropriate contacts with our Human Resources office regarding this matter. I will also forward this email up my management chain. I do not handle personnel issues, but if you have any technical questions regarding West Lake Landfill, please let me know.

Thanks,

Shawn Muenks, P.E.

Missouri Department of Natural Resources

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